



MAGNETIC RESONANCE IMAGING (MRI)

WHAT IS MRI?

MRI had been the most significant development in medical diagnostic imaging since the discovery of x-rays by Wilhelm Röntgen in 1895. MRI had been available for medical imaging from the mid-eighties and has been used in veterinary medicine from the end of the nineties. Magnetic resonance imaging is a non-invasive and very safe method of acquiring images of your pet's body, painlessly and with great precision. It can take images in any requested plane and of any tissue. MRI uses magnetic fields and radio frequency pulses. MRI is the best diagnostic test to differentiate between bone, soft tissues, gas, fluids and fat. It is important to note that MRI does not involve the use of radiation (like with x-rays or a CT-scan). Currently no dangerous side effects of MRI are known. The only small disadvantage is that your pet requires a light general anaesthetic in order to obtain the best quality images.

MAGNETIC RESONANCE IMAGING AT WEAR REFERRALS.

MRI provides your pet with the latest diagnostic technology as would be available for the rest of your family. Since August 2006 we have our own in-house MRI scanner which is available 24/7 for clinical cases. We have scanned a large quantity of patients over the last few years which means that we have become very experienced in using MRI on our patients. MRI enables us to obtain a more accurate diagnosis of your pet's problem and improve surgical planning. Urgent cases can be seen the same day or the next day as this is an in-house MRI scanner.

WHY SHOULD MY PET HAVE AN MRI SCAN?

The use of MRI is indicated in most patients with brain disease (seizures, abnormal behaviour), Patients with back problems disease (back pain, limb weakness), imaging of tumours (diagnostic and for surgical planning), imaging of the middle ears and imaging of nasal disease. MRI can also be used for imaging of

other parts of the body wherever this is indicated. MRI provides the extra detail needed to make the best possible decision about the treatment of your pet. We also work closely together with the Cavalier King Charles Spaniel Clubs and provide their MRI screening for Chiari Malformation/Syringo-Hydromyelia.

Note:

Magnetic Resonance Imaging is seen by neurologist as the golden standard for imaging of the brain and the spine.

MRI has replaced the need for invasive testing procedures such as myelography. Myelography (using radiographs or CT scanning) has been and is still being used to detect spine related conditions. However, this test requires the injection of a dye around the spinal cord. The information provided can be limited and several conditions are not detectable with myelography. Myelograms can produce seizures and can very occasional cause a fatality. MRI gives the best visualization of the spine and spinal cord possible and it is non-invasive. There are no needles injected into the spine as a myelogram requires. MRI tells your veterinarian whether the condition in the spine is from a disc herniation, infection, loss of blood supply to the spinal cord, tumours or other conditions. MRI is excellent at detecting soft tissue injuries and tumours in the extremities. MRI of the brain allows the veterinarian to determine if a seizure or weakness is being caused by conditions such as encephalitis, meningitis, vascular disease or tumours. In addition MRI is also useful to determine the response to treatment and whether a tumour has regressed.

I THINK THAT MY PET MIGHT BENEFIT FROM AN MRI SCAN, WHAT SHOULD I DO?

It is important to contact and see your own veterinary surgeon if you have any worries about your pet. He or she can decide if your pet's clinical problems warrant a MRI scan. Often your own veterinary surgeon will phone us to discuss the case.